What is claimed is:

1. An image processing method realized by using:

input means for inputting an image;

signal processing means for effecting signal processing on said image;

parameter deriving means for deriving distortion correction data;

lattice dividing means for dividing a picture with lattices;

parameter compressing means for compressing data necessary for calculation by using lattice positions determined by said lattice dividing means, positions at which said lattices are crossing each other and data obtained from said parameter deriving means;

parameter holding means for holding said compressed necessary data;

parameter decoding means for expanding compressed data at every division and using said expanded data to correct distortion;

control means for controlling said signal processing and decoding operation; and

output means for outputting or saving an image.

2. An image processing method according to claim 1, wherein said lattice dividing means divides equally a parameter to determine position at which data is compressed with lattices.

3. An image processing method according to claim 1, wherein said lattice dividing means divides unequally a parameter to determine position at which data is compressed with lattices by a width of power of 2.

4. An image processing method according to claim 1, wherein said lattice dividing means obtains an optimum point to minimize an error and the number of divided lattices by calculation in order to determine position at which data is compressed.

5. An image processing method according to claim 1, wherein said lattice dividing means divides equally a parameter with lattices in order to determine position at which data is compressed, said parameter compressing means holds an internally dividing point n-1, which results from dividing both ends of a lattice and its lattice segment by n by using the lattice position determined by said lattice dividing means, said lattice crossing position and data obtained from said parameter deriving means, as data necessary for calculation, and said parameter decoding means reproduces polynomial of degree n from a point n-1 between both ends of division at every division and expands said compressed data for use in correcting distortion.

6. An image processing method according to claim 1,

wherein said lattice dividing means divides unequally a parameter to determine position at which data is compressed with lattices by a width of power of 2 and said parameter compressing means holds an internally dividing point n-1, which results from dividing both ends of a lattice and its lattice segment by n by using the lattice position determined by said lattice dividing means, said lattice crossing position and data obtained from said parameter deriving means, as data necessary for calculation, and said parameter decoding means reproduces polynomial of degree n from a point n-1 between both ends of division at every division and expands said compressed data for use in correcting distortion.

7. An image processing method according to claim 1, wherein said lattice dividing means obtains an optimum point to minimize an error and the number of divided lattices by calculation in order to determine position at which data is compressed, said parameter compressing means holds an internally dividing point n-1, which results from dividing both ends of a lattice and its lattice segment by n by using the lattice position determined by said lattice dividing means, said lattice crossing position and data obtained from said parameter deriving means, as data necessary for calculation, and said parameter decoding means reproduces polynomial of degree n from a point n-1 between both ends of division at every division and expands said compressed data for use in correcting distortion.

8. An image processing apparatus comprising:

input means for inputting an image;

signal processing means for effecting signal processing on said image;

parameter deriving means for deriving distortion correction data;

lattice dividing means for dividing a picture with lattices;

parameter compressing means for compressing data necessary for calculation by using lattice positions determined by said lattice dividing means, positions at which said lattices are crossing each other and data obtained from said parameter deriving means;

parameter holding means for holding said compressed necessary data;

parameter decoding means for expanding compressed data at every division and using said expanded data to correct distortion;

control means for controlling said signal processing and decoding operation; and

output means for outputting or saving an image.

9. An image processing apparatus according to claim 8, wherein said lattice dividing means divides equally a parameter to determine position at which data is compressed with

lattices.

10. An image processing apparatus according to claim 8, wherein said lattice dividing means divides unequally a parameter to determine position at which data is compressed with lattices by a width of power of 2.

11. An image processing apparatus according to claim 8, wherein said lattice dividing means obtains an optimum point to minimize an error and the number of divided lattices by calculation in order to determine position at which data is compressed.

12. An image processing apparatus according to claim 8, wherein said lattice dividing means divides equally a parameter with lattices in order to determine position at which data is compressed, said parameter compressing means holds an internally dividing point n-1, which results from dividing both ends of a lattice and its lattice segment by n by using the lattice position determined by said lattice dividing means, said lattice crossing position and data obtained from said parameter deriving means, as data necessary for calculation, and said parameter decoding means reproduces polynomial of degree n from a point n-1 between both ends of division at every division and expands said compressed data for use in correcting distortion.

13. An image processing apparatus according to claim 8, wherein said lattice dividing means divides unequally a parameter to determine position at which data is compressed with lattices by a width of power of 2 and said parameter compressing means holds an internally dividing point n-1, which results from dividing both ends of a lattice and its lattice segment by n by using the lattice position determined by said lattice dividing means, said lattice crossing position and data obtained from said parameter deriving means, as data necessary for calculation, and said parameter decoding means reproduces polynomial of degree n from a point n-1 between both ends of division at every division and expands said compressed data for use in correcting distortion.

14. An image processing apparatus according to claim 8, wherein said lattice dividing means obtains an optimum point to minimize an error and the number of divided lattices by calculation in order to determine position at which data is compressed, said parameter compressing means holds an internally dividing point n-1, which results from dividing both ends of a lattice and its lattice segment by n by using the lattice position determined by said lattice dividing means, said lattice crossing position and data obtained from said parameter deriving means, as data necessary for calculation, and said parameter decoding means reproduces polynomial of degree n from a point n-1 between both ends of division at every division and expands said

compressed data for use in correcting distortion.

15. An image pickup apparatus suitable for the application of an image processing method realized by using:

input means for inputting an image;

signal processing means for effecting signal processing on said image;

parameter deriving means for deriving distortion correction data;

lattice dividing means for dividing a picture with lattices;

parameter compressing means for compressing data necessary for calculation by using lattice positions determined by said lattice dividing means, positions at which said lattices are crossing each other and data obtained from said parameter deriving means;

parameter holding means for holding said compressed necessary data;

parameter decoding means for expanding compressed data at every division and using said expanded data to correct distortion;

control means for controlling said signal processing and decoding operation; and

output means for outputting or saving an image.

16. An image pickup apparatus suitable for the

application of an image processing method according to claim 15, wherein said lattice dividing means divides equally a parameter to determine position at which data is compressed with lattices.

17. An image pickup apparatus suitable for the application of an image processing method according to claim 15, wherein said lattice dividing means divides unequally a parameter to determine position at which data is compressed with lattices by a width of power of 2.

18. An image pickup apparatus suitable for the application of an image processing method according to claim 15, wherein said lattice dividing means obtains an optimum point to minimize an error and the number of divided lattices by calculation in order to determine position at which data is compressed.

19. An image pickup apparatus suitable for the application of an image processing method according to claim 15, wherein said lattice dividing means divides equally a parameter with lattices in order to determine position at which data is compressed, said parameter compressing means holds an internally dividing point n-1, which results from dividing both ends of a lattice and its lattice segment by n by using the lattice position determined by said lattice dividing means, said lattice

crossing position and data obtained from said parameter deriving means, as data necessary for calculation, and said parameter decoding means reproduces polynomial of degree n from a point n-1 between both ends of division at every division and expands said compressed data for use in correcting distortion.

20. An image pickup apparatus suitable for the application of an image processing method according to claim 15, wherein said lattice dividing means divides unequally a parameter to determine position at which data is compressed with lattices by a width of power of 2 and said parameter compressing means holds an internally dividing point n-1, which results from dividing both ends of a lattice and its lattice segment by n by using the lattice position determined by said lattice dividing means, said lattice crossing position and data obtained from said parameter deriving means, as data necessary for calculation, and said parameter decoding means reproduces polynomial of degree n from a point n-1 between both ends of division at every division and expands said compressed data for use in correcting distortion.

21. An image pickup apparatus suitable for the application of an image processing method according to claim 15, wherein said lattice dividing means obtains an optimum point to minimize an error and the number of divided lattices by calculation in order to determine position at which data is

compressed, said parameter compressing means holds an internally dividing point n-1, which results from dividing both ends of a lattice and its lattice segment by n by using the lattice position determined by said lattice dividing means, said lattice crossing position and data obtained from said parameter deriving means, as data necessary for calculation, and said parameter decoding means reproduces polynomial of degree n from a point n-1 between both ends of division at every division and expands said compressed data for use in correcting distortion.

22. A display apparatus suitable for the application of an image processing method realized by using:

input means for inputting an image;

signal processing means for effecting signal processing on said image;

parameter deriving means for deriving distortion correction data;

lattice dividing means for dividing a picture with lattices;

parameter compressing means for compressing data necessary for calculation by using lattice positions determined by said lattice dividing means, positions at which said lattices are crossing each other and data obtained from said parameter deriving means;

parameter holding means for holding said compressed necessary data;

parameter decoding means for expanding compressed data at every division and using said expanded data to correct distortion;

control means for controlling said signal processing and decoding operation; and

display means for displaying an image.

23. A display apparatus suitable for the application of an image processing method according to claim 22, wherein said lattice dividing means divides equally a parameter to determine position at which data is compressed with lattices.

24. A display apparatus suitable for the application of an image processing method according to claim 22, wherein said lattice dividing means divides unequally a parameter to determine position at which data is compressed with lattices by a width of power of 2.

25. A display apparatus suitable for the application of an image processing method according to claim 22, wherein said lattice dividing means obtains an optimum point to minimize an error and the number of divided lattices by calculation in order to determine position at which data is compressed.

26. A display apparatus suitable for the application of an image processing method according to claim 22, wherein

said lattice dividing means divides equally a parameter with lattices in order to determine position at which data is compressed, said parameter compressing means holds an internally dividing point n-1, which results from dividing both ends of a lattice and its lattice segment by n by using the lattice position determined by said lattice dividing means, said lattice crossing position and data obtained from said parameter deriving means, as data necessary for calculation, and said parameter decoding means reproduces polynomial of degree n from a point n-1 between both ends of division at every division and expands said compressed data for use in correcting distortion.

27. A display apparatus suitable for the application of an image processing apparatus according to claim 22, wherein said lattice dividing means divides unequally a parameter to determine position at which data is compressed with lattices by a width of power of 2 and said parameter compressing means holds an internally dividing point n-1, which results from dividing both ends of a lattice and its lattice segment by n by using the lattice position determined by said lattice dividing means, said lattice crossing position and data obtained from said parameter deriving means, as data necessary for calculation, and said parameter decoding means reproduces polynomial of degree n from a point n-1 between both ends of division at every division and expands said compressed data for use in correcting distortion.

28. A display apparatus suitable for the application of an image processing method according to claim 22, wherein said lattice dividing means obtains an optimum point to minimize an error and the number of divided lattices by calculation in order to determine position at which data is compressed, said parameter compressing means holds an internally dividing point n-1, which results from dividing both ends of a lattice and its lattice segment by n by using the lattice position determined by said lattice dividing means, said lattice crossing position and data obtained from said parameter deriving means, as data necessary for calculation, and said parameter decoding means reproduces polynomial of degree n from a point n-1 between both ends of division at every division and expands said compressed data for use in correcting distortion.